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(54) Title: PROCESS FOR ACTINOL PRODUCTION FROM KETOISOPHORONE

(57) Abstract: Disclosed is a process for producing actinol from ketoisophorone which comprises contacting ketoisophorone with a recombinant microorganism or cell-free extract thereof in a reaction mixture, wherein said recombinant microorganism is obtainable by transforming a host microorganism, e.g. selected from the group consisting of microorganisms of the genera *Saccharomyces*, *Zygosaccharomyces*, and *Candida*, such as commercially available baker's yeast, *Saccharomyces cerevisiae* ATCC7754, *Saccharomyces rouxii* (*Zygosaccharomyces rouxii*) HUT7191 (IFO 0494), *Saccharomyces delbrueckii* HUT7116 (*Saccharomyces unisporus* IFO 0298), *Saccharomyces delbrueckii* (*Torulaspora delbrueckii*) HUT7102, *Saccharomyces willianus* HUT7106, *Zygosaccharomyces bailii* ATCC11486, *Candida tropicalis* IFO 1403, and a mutant thereof, which is capable of reducing ketoisophorone to levodione with a levodione reductase gene, e.g. a levodione reductase gene derived from a microorganism belonging to the genus *Corynebacterium*, such as *C. aquaticum* AKU611 (FERM BP-6448) or a mutant thereof, and isolating the produced actinol from the reaction mixture.